

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-14. (Canceled).

15. (New) A system of computers operated in a network using an H.323 protocol or a SIP protocol, comprising:

a gatekeeper;

a server for operating a client/server multi-user computer application;

a client for operating the client/server multi-user computer application;

an H.323 or SIP proxy,

wherein the client is configured to register and be authorized in the network using registration and authorization procedures in the H.323 protocol or the SIP protocol;

a user handling database, associated with the gatekeeper, for providing a user profile for the gatekeeper to determine whether the client is permitted to set-up an H.323 or a SIP call with the server,

wherein the gatekeeper, the server, the client, and the H.323 or SIP proxy each include a real time codec having a common H.323 or SIP interface and configured to establish a real time data transfer channel between the server and the client using the H.323 protocol or the SIP protocol and to permit thereafter the client to operate the client/server multi-user computer application using a data communications protocol other than the H.323 protocol or the SIP protocol.

16. (New) A method for operation and administration of a multi-user computer application program in a system of computers operating in a network in accordance with an H.323 protocol or a SIP protocol, comprising:

a gatekeeper;

a user handling database associated with the gatekeeper;

a client for operating a client/server multi-user computer application;

a server for operating the client/server multi-user computer application;

an H.323 or SIP proxy,

wherein the client is configured to register and be authorized in the network using registration and authorization procedures in accordance with the H.323 protocol or the SIP protocol,

the method comprising:

a client initiating a call set-up with the server as a call destination;
exchanging information of ports for receiving data and information related to whether a communication protocol to be used for the call is TCP or UDP,

the gatekeeper checking a user profile obtained from the user handling database to determine whether the client is allowed to set up a call to the server;

the gatekeeper informing the client whether the client is allowed to set up the call; and

if the client is allowed to set up the call, the client establishing a data channel to the server according to an enhanced H.323 protocol or an enhanced SIP protocol,

wherein the H.323 protocol or SIP protocol is enhanced using an extension supporting a real time codec included with the client and the server for establishing a real time data transfer channel between the server and the client using the H.323 protocol or the SIP protocol, and

wherein each real time codec supports a data communications protocol other than the H.323 protocol or the SIP protocol employed by the client and the server to operate the client/server multi-user computer application.

17. (New) A method according to claim 16, further comprising:

transferring data between the client and the server using the data communications protocol mapped into the real time codec.

18. (New) A method according to claim 16, further comprising:

the client closing the connection between the client and the server when a session established by the call set-up is over, and

informing the gatekeeper using H.323 protocol or SIP protocol procedures.

19. (New) A method according to claim 16, wherein the client is a game client and the server is a game server.

20. (New) A method according to claim 16, further comprising:

the gatekeeper monitoring the status of the call set up between the client and the server,
and

maintaining a record of a duration of the call.

21. (New) An arrangement for operation and administration of multi-user computer application programs in a system of computers operated in a network in accordance with an H.323 protocol or a SIP protocol comprising:

a gatekeeper means;

a user handling database associated with the gatekeeper;

a server means for operating a client/server multi-user computer application;

a client means for operating a client/server multi-user computer application;

firewall means provided with an H.323 proxy or an SIP proxy,

wherein the means in the network are configured to perform H.323 protocol or SIP protocol registration and authorization procedures based on information provided by the user handling database, and

wherein at least one of the gatekeeper means, client means, server means, and firewall means including a cooperating H.323 or SIP protocol enhancement function means, the protocol enhancement means comprising a real time codec configured to cooperate with a respective one of the gatekeeper means, client means, server means, and firewall means.

22. (New) A method of using of a H.323 or SIP telecommunication network arrangement in a computer network game system having a gatekeeper including a real time codec, an H.323 or SIP proxy including a real time codec, plural computer network game clients each including a real time codec, and at least one respective computer network game server including a real time codec, the method comprising:

configuring the gatekeeper, the H.323 or SIP proxy, the game clients, and game server to communicate via respective real time codecs;

controlling access to the server by one of the clients based on information provided by a user handling database associated with the gatekeeper;

obtaining data for use of the server by the one client, the data to be used for determining a monetary charge for that usage; and

detecting and recording communication faults and irregularities.

23. (New) A method of providing cooperative real time operation between a client part and a server part of a client-server real time computer program application over a H.323 or SIP computer network including a gatekeeper associated with a user handling database and an H.323 or SIP proxy, the client part and server part being configured with a data exchange interface to adapt to an H.323 or SIP proxy standard multimedia computer call control and communication program, the method comprising:

invoking the client part of the client-server real time computer program application,

invoking a client call control part of a standard multimedia computer call control and communication program,

invoking the server part of the client-server real time computer program application,

invoking a server call control part of the standard multimedia computer call control and communication program, and

based on information provided by the user handling database, effecting a multimedia call from the client call control part to the server call control part thereby establishing a real time communication link between the client part of the client-server real time computer program application and the server part of the client-server real time computer program application.

24. (New) A method according to claim 22, further comprising:

protecting the server by a computer network firewall, and allowing undisturbed data communication through the firewall between a server and a respective client.

25. (New) The method of claim 23, wherein the standard multimedia computer call control and communication program is operated according to an H.323 protocol or a SIP protocol.

26. (New) The method of claim 23, wherein the client part of a client-server real time computer program application and the client call control part of the standard multimedia computer call control and communication program operate on a first computer platform, and wherein the server part of the a client-server real time computer program application and the server call control part of the standard multimedia computer call control communication program operate on another computer platform.

27. (New) A method of establishing and running co-operative real time operation of a client part and a server part of a client-server real time computer program application over a H.323 or SIP computer network having a gatekeeper including a H.323 or SIP proxy, the client and server parts each having a data exchange interface to permit data communications according to a standard H.323 or SIP multimedia computer call control and communication program, the method comprising:

- invoking a client part of the client-server real time computer program application,
- invoking a client call control part of the standard H.323 or SIP multimedia computer call control and communication program,

- invoking a server part of the client-server real time computer program application,
- invoking a server call control part of the standard H.323 or SIP multimedia computer call control and communication program,

- based on information provided by a user handling database associated with the gatekeeper, communicating a setup message from the client call control part to the server call control part,

- communicating an acceptance message from the server call control part to the client call control part,

- communicating a media suggestion and control receiver address message from the client call control part to the server call control part,

communicating a media acceptance and data destination message from the server call control part to the client call control part,

communicating a media suggestion and control receiver address message from the client call control part to the server call control part,

communicating a media accept and data destination message from the server call control part to the client call control part,

communicating a control message, as required by the application program server part, from the application program server part to the application program client part, and

communicating a data message, as specified by the control message, from the application program client part to the application program server part via a client real time codec and a server real time codec.

28. (New) The method of claim 24, wherein communicating the control message and the data message, respectively, is effected by direct message communication between the application program client part and the application program server part.

29. (New) The method of claim 24, wherein communicating the control message and the data message between the application program client part and the application program server part, respectively, is effected by communicating the messages via the client call control part and the server call control part.